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Engineering

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OFFICIAL PROCEEDINGS
Meeting of Dec., 1919.

Volume XVIII.
No. - - - 9

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INCORPORATED OCTOBER 1913

Canadian Railway Club

MONTREAL

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CONTENTS

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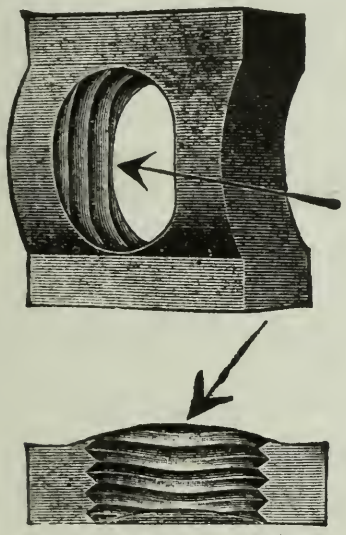

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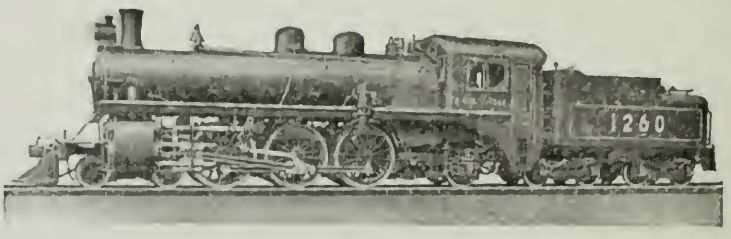

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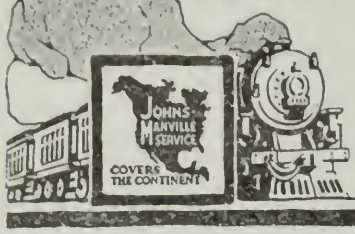

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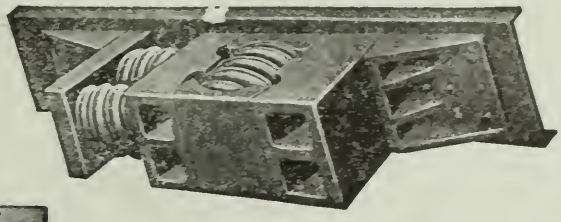

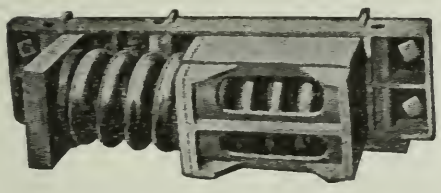

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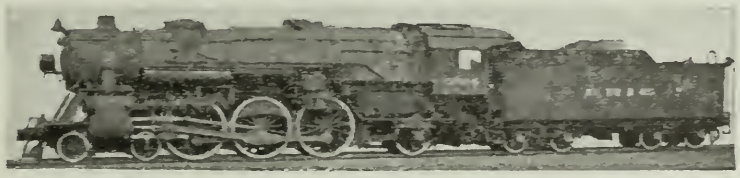

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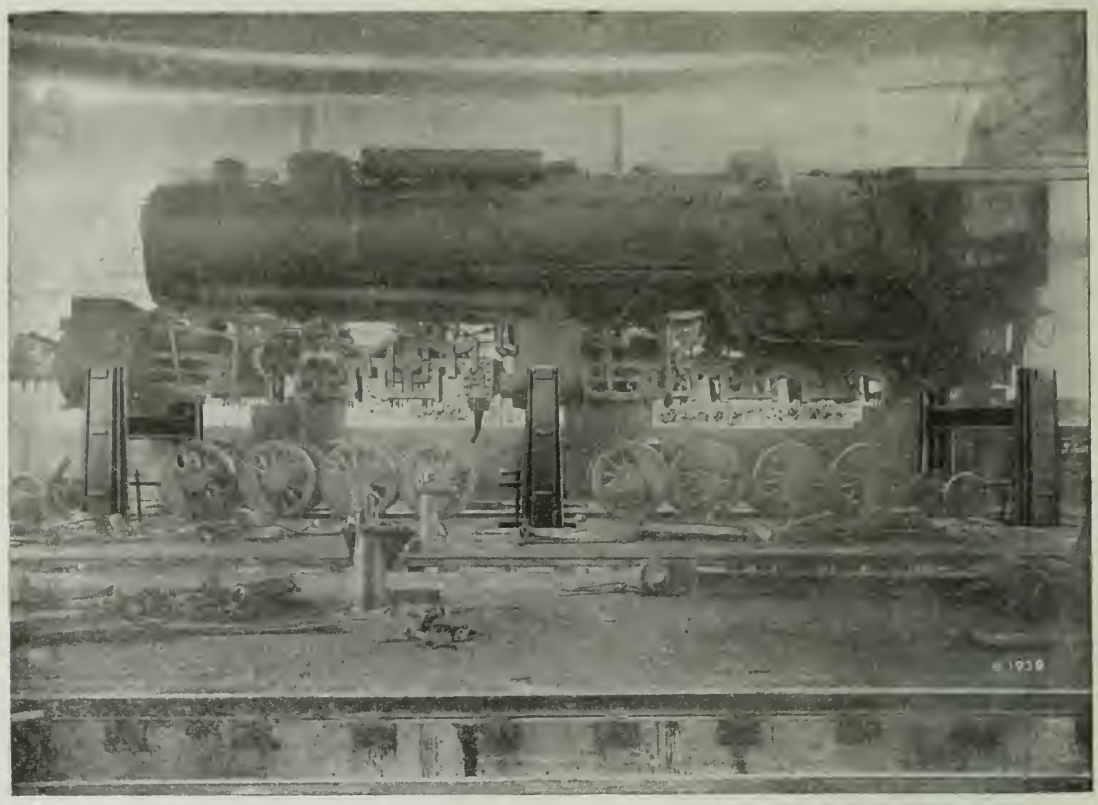

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W. A. BOOTH, Secretary, 131 Charron Street, Montreal.

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PROCEEDINGS OF THE CANADIAN RAILWAY CLUB.

Windsor Hotel, Montreal,
December 9th, 1919.

Chairman (Mr. J. Hendry):

Come to order gentlemen, please. The first order of business is the signing of the cards which you will find on the seats.

The Secretary:

May I suggest, in connection with the signing of the cards, that you pass same along to the gentlemen on the end seats so that they may be collected from the centre aisle. This will help in making more complete the enrollment.

Chairman:

The minutes of the previous meeting have been printed and are now being forwarded to all members. It will not be necessary to read them. We will now ask the Secretary to make his announcement of new members.

Secretary:

Mr. President and members, the list of applications for membership is as follows:

New Members.

Allen, C. D., T. McAvity & Sons, Room 106, 95 King Street East, Toronto, Ont.

Brett, I. F., Public Works Engineer, c/o P.O. Box 103, Montreal.

Beal, S. P., Clerk, Grand Trunk Railway, 111 Havelock Ave., Ottawa, Ont.

Buckland, A. W., Layer Out, C. P. R. Angus Shops, 1113 Mount Royal Ave. E., Montreal.

Crawford, R., Contract Foreman, C. P. R. Angus Shops, 410 Mance Street, Montreal.

Delaney, O. J., T. McAvity & Sons, 2050 St. Urban Street, Montreal.

Ferguson, B. H., Fireman, Grand Trunk Railway, 377 Bourgeois Street, Montreal.

Ferguson, Thos., Car Schedule, C. P. R. Angus Shops, 1875 De La Roche Street, Montreal.

Forbes, Chas., Contract Foreman, C. P. R. Angus Shops, 533 Papineau Ave., Montreal.

Gordon, G. H., Dominion Foundries & Steel Ltd., Hamilton, Ont.

Gordon Sidney, Supt. of Store Order, C. P. R. Angus Shops, 1603 Ontario Street East, Montreal.

Hall, J., Contract Foreman, C. P. R., Angus Shops, 386 Fabre Street, Montreal.

Hogan, Wm., Loco. Inspector, C. P. R. Angus Shops, 1222 Papineau Ave., Montreal.

Jackson, H. G., Auditor, Mt. Royal Tunnel & Terminal Co., Ltd., 411 Dorchester St. W., Montreal.

Jarman, Thos., Chargehand Machinist, C. P. R. Angus Shops, 137 Stadacona St., Hochelaga.

Kastella, A., Manager, C. A. Dunham Co., 711 New Birks Building, Montreal.

Kendall, G. H., C. P. R. Angus Shops, 1571 Papineau Ave., Montreal.

Kerr, Chas. D., Loco. Engineer, Grand Trunk Railway, Richmond, Que.

Laporte, A., Foreman, Canadian Pacific Railway, Angus Shops, Montreal.

Maw, Chas. F., Loco. Foreman, Grand Trunk Railway, Coteau Jct., P.Q.

McCaffrey, M. P., Century Coal Company, 310 Dominion Express Bldg., Montreal.

McLaughlin, M. J., T. W. Title Company, Post Office Box No. 3030, Montreal.

McHattie, F. W., Canadian Explosives Co., 12 Windsor Ave., Westmount.

Ogilvie, A. G., Road Foreman, G. T. Railway (M. P. Dept.), Ottawa, Ont.

Smith, Roy A., Draughtsman, Canadian Pacific Railway, 669 Adam Street, Montreal.

Summers, S., Contract Foreman, C. P. R. Angus Shops, 2361 Waverly Street, Montreal.

Thorburn, C. D., Asst. Supervisor Piece Work, C. P. R. Angus Shops, Montreal.

Van Gilder, F., Salesman, Norton Callard & Co., 32 Herald Bldg., Craig St. W., Montreal.
Walsh, W. R., Trav. Rep. Nathan Mfg. Co., 263 West High Street, Detroit, Mich.

Chairman:
You have heard the list of applications for membership. What is your pleasure?

Mr. T. C. Hudson:
I move these applications be accepted.

Mr. W. H. Sample:
Seconded.

Chairman:
It has been moved by Mr. Hudson, seconded by Mr. Sample that these applications be accepted. Are all in favor?
Carried.

MEMBERS PRESENT:

Hendry, J.
Anderson, A.
Archibald, C. P.
Arnold, D. R.
Barrett, C. W.
Battley, E. R.
Baxter, J. A.
Baxter, M. R.
Beardshaw, A.
Benger, F.
Berger, W. A.
Blumenthal, S.
Boon, W. R.
Boughton, L.
Bourgouin, J.
Boyer, G.
Brett, J. F.
Brown, H.
Buckland, A. W.
Buckland, J. W.
Buckle, W. C.
Burns, C.
Burns, E. W.
Campbell, A. J.
Campbell, M. M.
Carter, J. W.
Coleman, M. T.
Crawford, R.
Crutchilow, G.
Curtis, G.
Davis, H.
DeAngelis, G.
de la Cour, P. E.
Dick, T.
Donnelly, M. R.
Dyer, W. E. L.
Ericson, F.
Ferguson, T.
Fradd, F. J.
Gibson, L.
Gregory, W. A.
Hall, John.
Hall, R. E.
Hampshire, A.
Hannah, D. M.
Hannah, W. D.
Hanson, P. R.
Harvey, R. H.
Hassal, C.
Heafield, R.
Hickman, F. C.
Hills, A.
Hogan, W.
Hudson, T. C.
Hunter, W. C.
Jarman, T.
Jones, W. H.
Joyce, W. E.
Kearney, T.
Kell, G. A.
Kendall, G.
Keniston, C. R.
Kerr, J. M.
Killikelly, D.
Krauser, W. R.
Lachapelle, J. D.
Larkin, L.
Legere, A. J.
Lister, W.

Lloyd, E. E.
Loucks, D. A.
Loudon, A. C.
MacCabe, C.
MacKie, R. L. D.
MacNab, E. S. M.
Martin, Chas.
McCuaig, J. D.
McDonald, A.
McHattie, F.
McHattie, T.
McKinney, H.
McKie, W. C. B.
McVicar, Robt.
Mimms, A. E.
Mitchell, C. G.
Monat, C. O.
Montgomery, H.
Moore, F. W.
Moore, T. W.
Mullaly, M. J.
Needham, R. J.
Oliver, R. M.
Palmer, J. E.
Parsley, W. H.
Payne, H.
Pearce, H.
Peverley, R. D.
Poitras, O.
Pouphrett, W. F.
Powell, E. G.
Powell, Jas.
Prouse, W.
Pugh, G. W.
Purdy, F. A.
Pyne, R. A.
Riddington, A.
Robb, G. W.
Rodgers, J. H.
Rodgers, W. H.
Russell, C. H.
Schellens, E. L.
Shortley, B. F.
Sills, A. S.
Sleigh, T.
Spence, J. M.
Spence, W.
Starke, A.
Stewart, W. H.
Taylor, S. G.
Tetlaw, H.
Thomas, E.
Tinkler, C.
Trindall, D.
Waller, S. J. H.
White, M.
Wickson, F.
Wickson, G.
Wilson, G. M.
Winterrowd, W. H.
Welham, H.
Wells, C. W.
Wheatley, W. H.
Woodhouse, G. W. A.
Woodman, J. M. W.
Woodman, T. G.
Wright, A.
Wyer, F. H.
Yost, W. H.
Young, C. E.
Zener, J. M.
Booth, W. A.,
and others.

Chairman:

The next order is under the heading of New Business.

Secretary:

Mr. President and gentlemen, under this heading it has been the practice in the past to bring up at the December meeting the question of the annual banquet which is usually held on the last Saturday in January of each year so that the members may decide whether such a banquet shall be held. I might say that it has already been discussed by the Executive Committee to-night, but it is felt the same should be submitted to the members.

Mr. James Powell:

I would move that we hold the annual banquet on the last Saturday in January as has been the custom for several years prior to the war.

Mr. Thos. McHattie:

I second that.

Chairman:

It has been moved by Mr. Powell, seconded by Mr. McHattie that we hold our banquet on the last Saturday in January. Are all in favor?

Carried.

Chairman:

Our treasurer may have something to say in regard to this matter.

Mr. E. E. Lloyd:

This matter is all cut and dried as far as I can see. It was understood that in making the announcement to the members they would receive advice that the price would have to be raised this year. In previous years there has always been a loss of from $350 to $400—that is to say the $2 paid for membership has not covered the expense by $300 or $400. This year we are further financially embarrassed by the increase in the cost of printing which is our largest item. The cost of printing has gone up one hundred per cent. Instead of increasing the annual dues the proposition now is to make the banquet self-sustaining, and the members will be charged a price not exceeding $4 per plate. The idea was, I understand, to put that in the motion,—that is, whether or not, in view of the fact that the dues would have to be raised it would not be better to increase the price of the tickets for the dinner. It might be well to get the views of the members on this before we go any further.

Mr. James Powell:

If necessary I will amend my motion. In the past we have found that the membership dues only took care of the expense of the Windsor Hotel, and outside of that we had to pay for the printing of the menu cards, and the talent. I will therefore include in my motion that the tickets be sold not to exceed $4 each.

Mr. Thos. McHattie:

I second the amendment.

Chairman:

You have heard the amendment. Is there any further discussion or are all in favor?

Carried.

Chairman:

I will now ask the Secretary to read the names of the members which have been appointed a Committee to look after the banquet.

Secretary:

The names of the committee appointed at the Executive Committee meeting to-night to look after your interests at the banquet follows:

Messrs. V. G. R. Vickers, W. A. Kingsland, N. Holland, W. H. Robb, G. M. Wilson, E. E. Lloyd, W. A. Booth.

Chairman:

Gentlemen, I think this committe will give a good account of themselves. I will now call upon Mr. E. E. Stevens, Safety Engineer, Canadian National Railways, Moncton, N.B., to give his moving picture display entitled "The House that Jack Built."

Mr. President and Members of the Canadian Railway Club:

It is a pleasure and privilege for me to be here this evening and have the opportunity of exhibiting to you the Safety Film entitled "The House that Jack Built." This film has been used at Safety Rallies on the Canadian National Railway Lines for some considerable time, and has proven one of the most effective methods of impressing railway employees with their responsibility in accident prevention, the picture is a wonderful realistic story of the sad results which follow from carelessness on the part of a railway man, not only endangering his own life and that of his fellow employees, but the happiness of his wife and home, as well as that of the entire community. The picture is not confined to operation and transportation but deals very effectively with shop conditions, and is one which I think cannot fail to impress the importance of safe practices. I do not think that there is anything further I can say in regard to the picture, as it describes itself, you will, therefore, please excuse me while I arrange for the showing of the picture—the picture was then shown.

A Description of the Moving Picture Entitled "The House That Jack Built."—By Marcus A. Dow.

The title is taken from the Mother Goose Rhyme of that name, Jack Foster, a railroad brakeman, who is a fine type of a man in character and appearance, and who has saved his money, is building a new home. The opening scene shows him with his wife and two little children on Christmas morning gathered around a Christmas tree. Husband and wife are delighted over the prospects of moving into their new house, the building of which is nearly completed. Jack, although a fine fellow, is found to possess one fault, that of carelessness, while engaged in his work as a brakeman. He is brought to task by Jim Stevens, a Conductor, who is his close friend.

Rear-end collision scene, in which three cars are telescoped. Part of Mrs. Foster's vision in which she sees a wreck caused by her husband's failure to flag.

Jack refuses to join in a game of cards, stating he is saving his money, Stevens declares that Jack must not only refuse to gamble for money but also to take chances on losing his life. Later, while Jack and his wife are showing their new house to Stevens, Mrs. Foster overhears the Conductor tell Jack that sorrow will some day cross the threshold of his home if he does not stop taking chances. Mrs. Foster becomes greatly alarmed over her discovery that her husband is careless. Her fears become so acute that she is haunted by visions of what might possibly happen through his carelessness, and she sees the vision of a train collision due to her husband's neglect in failing to properly observe the flagging rule and go back with his flag a sufficient distance to protect the rear end of his train, which has become stalled. In the vision scene a most realistic rear-end collision takes place—a heavy freight train colliding with and demolishing several cars of another train, and apparently killing a conductor. Mrs. Foster becomes hysterical as this vision passes before her. In the earlier scenes it has been shown that "Happiness was the Malt that lay in the House that Jack Built," applying the term to the words of the old nursery rhyme. As Mrs. Foster's peace of mind becomes threatened through the fear of the possible result of the thoughtlessness of her husband, carelessness is shown to have been "The Rat that was eating Happiness, the Malt, that lay in the House that Jack Built."

At this point Mrs. Foster hastens to the railroad yard to allay her fears, and overhears her husband and two men talking. Here Stevens gets Donovan, an employee who lost his leg because his mind was occupied with thoughts of a quarrel he had with his wife at home, making him oblivious to surrounding dangers, tell how he got hurt. As the story is told the action on the screen shows Donovan knocked down by a car and his leg run over.

Stevens, the conductor, induces Jack to attend a Safety Rally and during the course of the scenes in the hall where the Rally takes place a number of unsafe practices in yards and shops are vividly enacted on the screen. One sees the result of leaving nails sticking up in planks left carelessly about where persons might step on them; a shopman is seen to lose an eye because he refused to wear Safety goggles provided for his protection; a carpenter loses a finger while working at a buzz saw with the guard removed from the saw; a brakeman is knocked off the roof of a box car when a coupling is made, because he stood in a careless manner, a brakesman, who went between moving cars contrary to in-

structions, falls and his arm is run over; an engineman standing between the rails and boarding the footboard of an engine falls under the engine. These and other effective scenes follow in rapid succession. As each of these scenes appear on the screen, "close-up" views of various characters in the audience are shown, their facial expressions depicting the great impression the vivid scenes on the screen have made on their minds. For instance, a one-eyed man, viewing the scene in which the goggles are not used, turns to his wife and tells her that was the way he lost his eye; a man with a crippled hand tells his daughter, who sits beside him, that the man in the picture who used the saw without the guard in place paid the same price that he did for his carelessness, etc.

Following the Safety Rally, Jack and his wife return to their home. Jack is greatly impressed by what he has seen and heard. He bends over the bed in which his two children are sleeping and resolves to banish carelessness forever and the play ends with a statement that:

"Resolution became the Cat
That killed Carelessness, the Rat
That was eating Happiness, the Malt
That lay in the House
That Jack Built."

Two little children, a very sweet little girl of three years and a boy slightly older, as the children of Jack, appear in a number of the scenes and add a touch of human interest that is irresistable.

Chaiman:

Gentlemen, we are much indebted to Mr. Stevens for his very interesting entertainment to-night on *"Safety First."* We also have with us Lt.-Col. R. J. Birdwhistle, general secretary of the St. John Ambulance Association, who will give us a short talk on *"First Aid to the Injured."*

Col. Birdwhistle.—Mr. President and gentlemen: I am very pleased to have the opportunity to-night of speaking to such a large and representative gathering of railway men, and those of Associated interests, and more particularly because I know that these men are vitally interested in the welfare of all connected with the industry, and consequently in the subject of First Aid to the Injured. When I came to this

meeting to-night I did not anticipate being called upon for any extended remarks, but now that I have been extended this privilege I should be missing a splendid opportunity if I did not take advantage of the occasion to place before the meeting a brief reference to the history of the origin of this important work, and what the St. John Ambulance Association is endeavoring to accomplish in Canada.

The St. John Ambulance Association is the Ambulance department of the oldest Order of Knighthood in the British Empire,—Established over 900 years ago. I regret to say that frequently its origin is connected up with one or the other of the cities in Canada, bearing a somewhat similar name, but this no doubt is due to the fact that the organized activities of the Association has only come into prominence in the Dominion during the past ten years.

The Order of St. John of Jerusalem was founded by Peter Girard as a religious brotherhood or fraternity, in Jerusalem, at the time of the Crusaders for the relief of the sick and needy, and they finally became the Alomoners of Europe. They were driven from Jerusalem, and, as a matter of defense, developed into a band of soldier monks and warring physicians.

Time and space will not permit of tracing the Order in detail, suffice it is to say that, driven from one stronghold to another by the Turks, they at length reached the island of Malta, which was ceded to them by the Emperor Charles the Fifth of Germany, where they grew and prospered, and became one of the largest and most powerful brotherhoods in the world, but through the treachery of the Grand Master in 1798, the island was betrayed to a foreign power, the Knights were banished, and their property seized and they were never again seen in Malta, where they had ruled for 268 years. The Order was revived by Sir Robert Peel and other gentlemen of position and became very active in its work of mercy until 1888 when it received Royal recognition and a Charter of Incorporation was granted them. The original headquarters of the English branch had been established at Clerkenwell, in London, but much of the estate had been lost in the preceeding years, and little was left of the original property, except that portion known as The Gate. Here it lives to-day, still active in its works of mercy and faithful to its motto: "Service in the Cause of Humanity."

In 1877, the order established a department which has since been known as The St. John Ambulance Association.

This move was largely the result of the experience met with in the Franco-Prussian war of 1870-71, when it was felt that the Medico-Military arrangements were not sufficient to properly care for the sick and wounded in time of war, and that if such conditions were to be improved it would be necessary to properly instruct the public in time of peace. The necessity for such an organization may be gathered from the fact that when the Association was first formed no appliances for use in cases of accident in peace time were known, even in England, and a gate or a shutter was considered a proper vehicle for carrying the unfortunate sufferer, of an accident to the hospital or doctor's surgery. Outside the walls of a general hospital stretchers were unknown while litters and ambulance waggons had never been heard of except for military purposes. Even the triangular bandage, which is now such a popular portion of the Ambulancer's equipment, and which may be formed by folding a handkerchief or any other square fabric, with the opposite angles approximated, was absolutely unknown in England.

There are two events common to human life which cannot be foreseen, but which, when they occur, need all the immediate and intelligent action of which men or women are capable. These are accidents and cases of sudden illness. Only those who have experienced it fully realize the mortification felt, when in the presence of suffering occasioned in either way, they recognize their inability to render any assistance. When it is considered how great are the possibilities of accidents in journeys of every description, especially in this country, and how manifold the dangers, even in the performance of home duties, it is not difficult to form some estimate of the need for ready resourceful action, or of the wisdom of learning how to minimize the loss of blood or pain which must inevitably arise from accidents and sickness. It is not claimed that ambulance instruction makes the ambulance student either a doctor or a nurse. The teaching of the Association differs very widely from the teaching of the medical college, or nurses training school. Its object is to supplement, not to supplant, the assistance rendered by the medical profession, and aid the doctor in his work. The Surgeon is taught to use the best and most aproved apparatus for every variety of injury, whereas the ambulancer is instructed how to use scientifically, the material of whatever nature is first to his hand, in an emergency. He is taught how to make a bandage out of a necktie, or a handkerchief, a tourniquet out of a belt, and is instructed in the utilization of a stick, a pillow or a

folded newspaper, as a splint, and how to construct a stretcher of such common articles as a pair of laths and a couple of coats. The Ambulance nurse moreover, is taught how to act in the absence of skilled help, which is so rarely available. A few of the ordinary accidents of every day life, will exemplify what an ambulance training can do. Cuts and wounds for instance are frequent enough in every walk of life, and in this land of sport, serious wounds of arteries are by no means uncommon. Prompt pressure, as taught in ambulance classes will often save life in this class of injury. Even in minor cuts and bruises, the intelligent application of simple dressing will frequently obviate serious attacks of blood-poisoning or lock-jaw, resulting from neglect or the application of many popular but dangerous so-called "remedies." Similarly, cases of fainting are common enough, and the individual who knows what to do is a very welcome person when cases of this kind occur. Fits frequently happen in the street, and the unfortunate subjects require prompt treatment to avoid unnecessary suffering. In sea-port and river-side cities, and summer resorts, treatment of the apparently drowned has a special interest. Ignorant and careless handling of victim of prolonged immersion has often unwittingly completed the work of suffocation which the water had only partially performed. These are only a few examples where prompt treatment at the time can and does save life. The Association is essentially a life-saving organization.

In addition to the courses of study already mentioned, which are largely preparatory for service in cases of accident or illness, the Association has established classes of Home Hygiene throughout the country, with beneficial effect. Lack of the simplest Hygiene precautions are responsible in many cases for the spread of disease, and the Association is anxious to still further encourage such classes, as a knowledge of Hygiene would tend to improve sanitary conditions under which people live, and to a considerable extent reduce preventable diseases. Hygiene is extensive in its scope and like other sciences has been elaborated and specialized in various branches. There is personal hygiene and public hygiene; the hygiene of infancy and childhood; occupational and industrial hygiene, and civil, military, and state hygiene. All of these are embraced in the course of study offered by the Association and the more generally this course is taken up, the more beneficial will be the results.

Tuberculosis, which is perhaps the most serious plague, as it not only kills thousands, but cripples thousands more, is

essentially a preventable disease. Canada wants her men and women, and the education of the latter is especially important. A large percentage of children die the first year. Think of the horror which is caused if a dozen are killed in a railway accident; yet in every province of Canada hundreds of children are killed, not by cruelty, but by ignorance and often by mistaken kindness.

These then are the aims of the St. John Ambulance Association: to aid the injured; to nurse the sick, and to prevent disease. The noble aims may be summarized in the statement that we seek to teach the men of Canada the first lesson of citizenship, to help one another; the women, the first lesson of womanhood, to be wise mothers, and the children the first right of childhood, to be healthy.

While the work of the Association has been known in Canada for the past 30 years, it has only existed in a limited way, and it was not until 1910 that a Canadian Branch was established, through which the work has grown until to-day over 90,000 men and women in this country have now a better knowledge of what to do in case of accident. The pioneers in the movement in Canada were undoubtedly the Railways. First Aid departments have existed for a number of years in connection with the Canadian Pacific Railway, the Grand Trunk Railway, the Intercolonial Railway, and the latter now uder the name of the Canadian National Railways has classes of instruction in active operation at various points throughout the country.

I would like to have the opportunity of bringing other features of the work of the Association to your attention, but as my time is limited, I will simply ask of you gentlemen to give this work all the consideration which it undoubtedly deserves, as I feel sure that the various industries with which you are connected will derive immense benefits through properly trained employees, and the latter much information that will be of value to them in their home life. I shall now have the pleasure of showing you on the screen some pictures illustrating some of the practices taught in Ambulance Training. Mr. Stevens has shown you pictures dealing with "Safety First" or the result of carelessness, and I shall have the opportunity of following with "Safety Second" or what can be accomplished by "Carefulness."

Chairman:

We are indeed greatly indebted to Col. Birdwhistle for

his lecture and moving picture demonstration on "First Aid."

Mr. Geo. Smart:

Before we close I should like to propose a very hearty vote of thanks to Mr. Stevens and Col. Birdwhistle for the splendid pictures shown here this evening. Personally, I can say they were very instructive and I enjoyed them very much. They contain lessons which we can take home, especially the first picture, and the second picture on "First Aid" is something which we should all know about. I have much pleasure in proposing this vote of thanks.

Mr. E. D. Smith:

I have pleasure in seconding that motion.

Chairman:

It has been moved by Mr. Smart, seconded by Mr. E. D. Smith that a very hearty vote of thanks be tendered to Mr. Stevens and Col. Birdwhistle for their entertainment this evening. Please signify your appreciation in the usual manner.

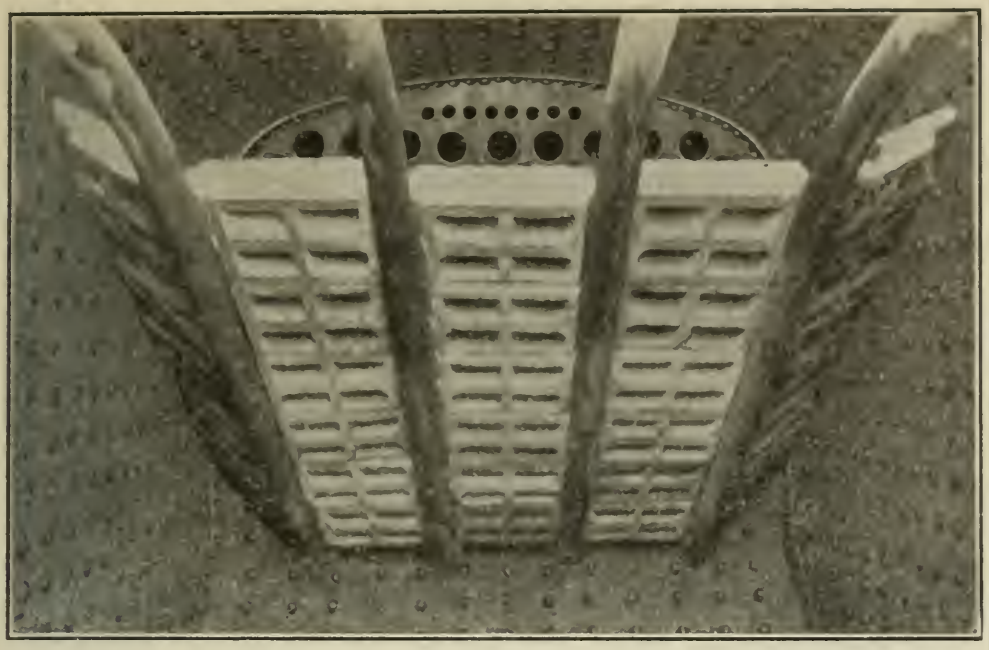
Carried. Applause.

Secretary:

Your President has asked me to announce that at our next meeting in January we are to have a paper by Mr. E. T. Spidy, of the Canadian Pacific Railway, entitled Graphic Production Control. This will be a very interesting paper and throws a new angle on Railroad Shop Statistics and on methods of controlling production by means of graphical charts which, are simple and practical in operation.

Chairman:

The Secretary advises me that he has arranged for coffee and sandwiches in the room at the rear. We shall be glad to have all stay and partake of these refreshments.



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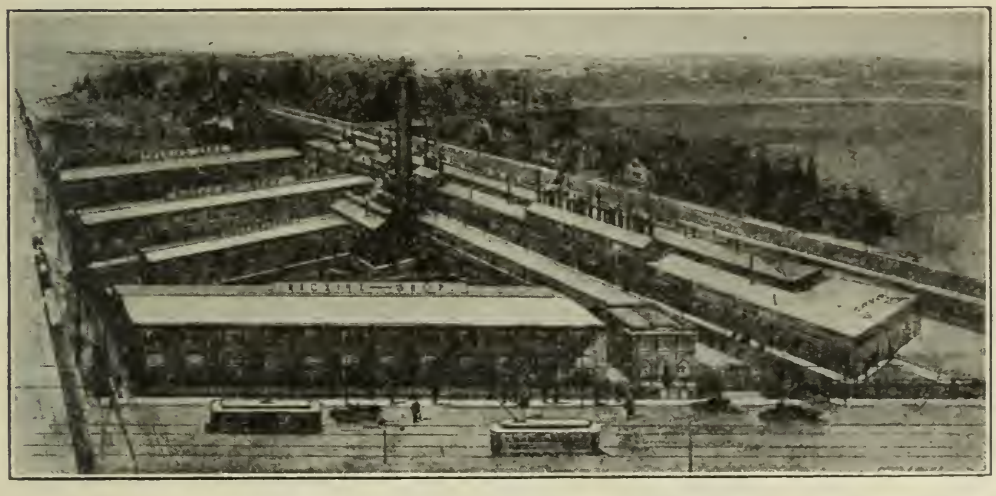

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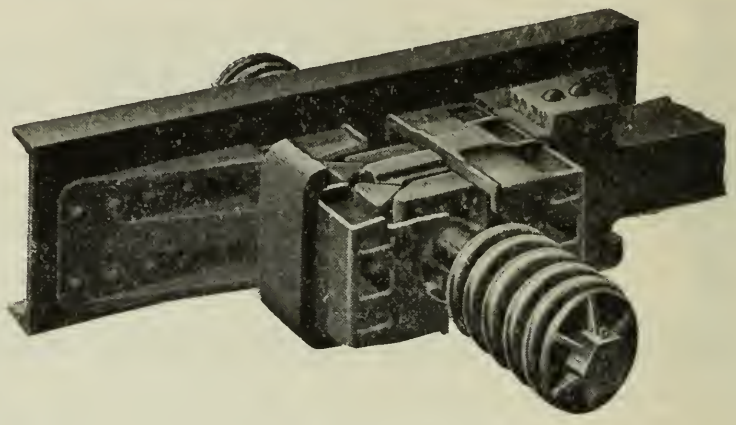

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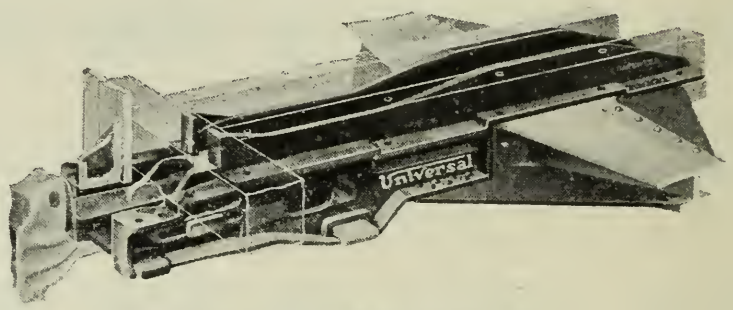

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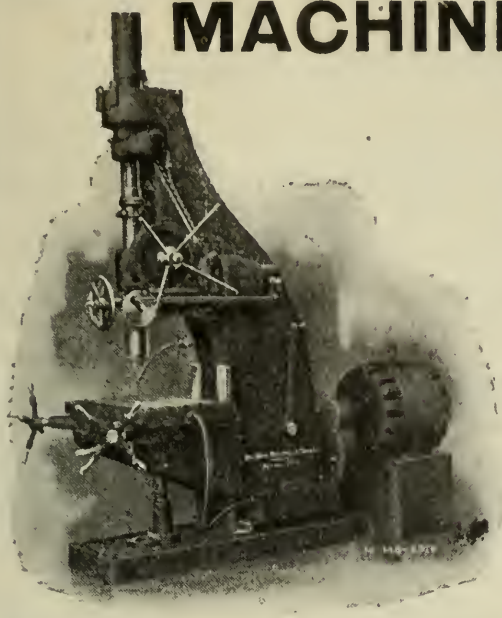

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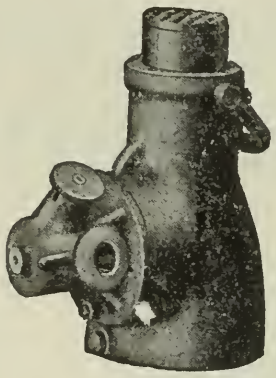

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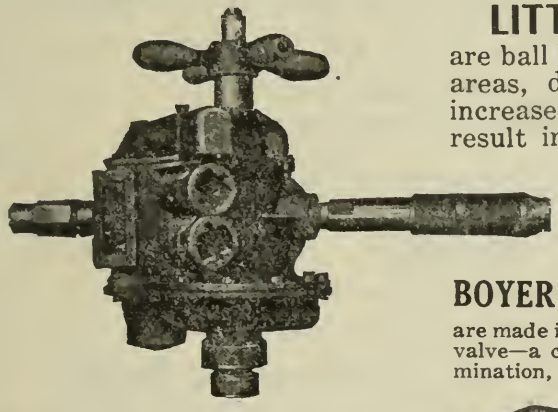

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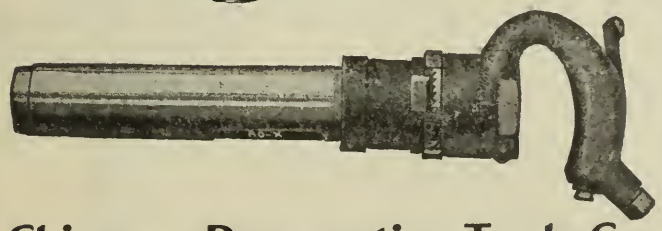

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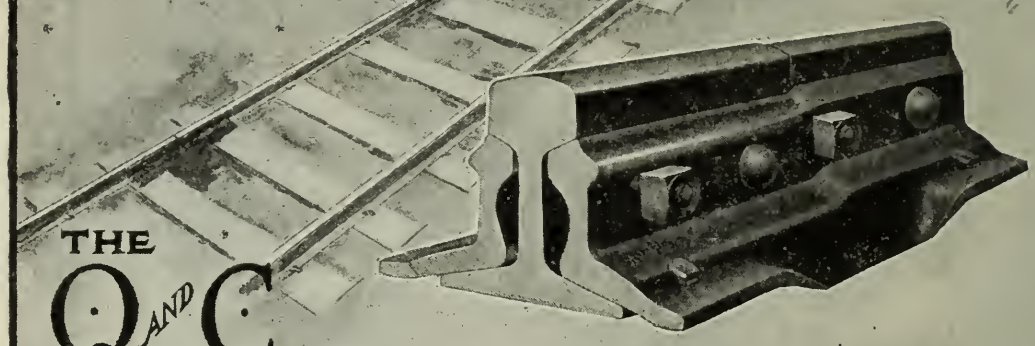

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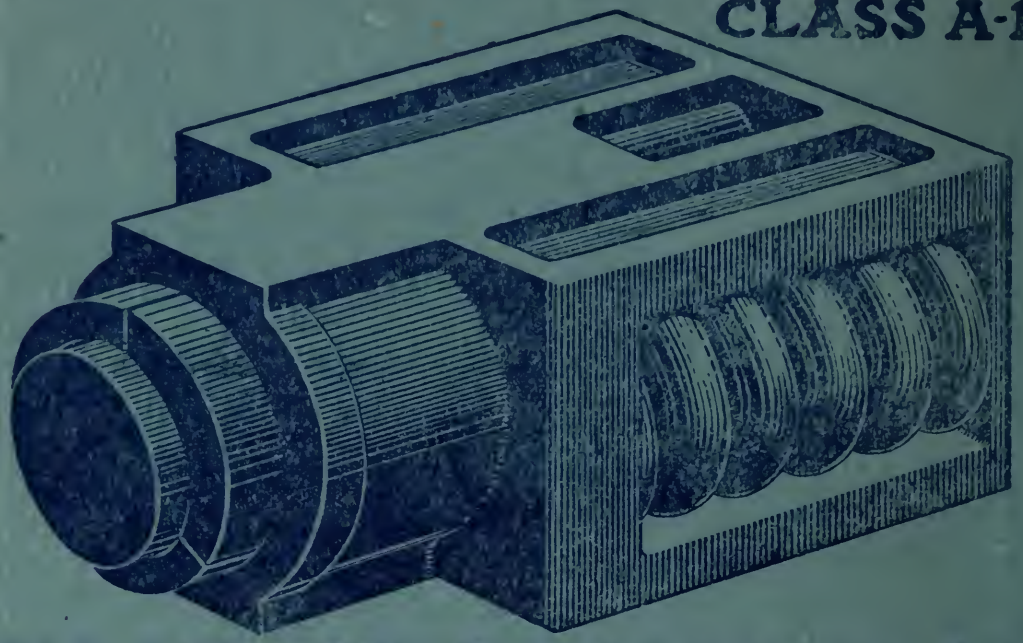

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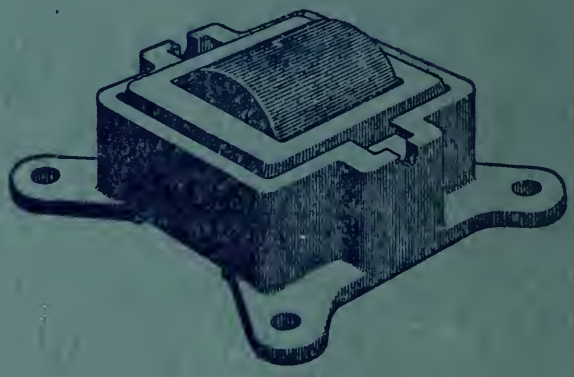

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